

## THE RANGE OF PRUNUS AMERICANA IN NEW ENGLAND

Frank C. Seymour

Mr. R. C. Hodgson of South Hero, Vermont, brought to the Pringle Herbarium of the University of Vermont a specimen of a Prunus in flower. Later in the season, he brought also some excellent specimens from the same stand with mature leaves and bark several years old. The identification of these specimens has led to a far more extensive investigation than would have been expected. While they prove to be Prunus americana Marshall, a familiar species, some unexpected facts were brought to light.

Questions arose: Is Prunus americana common in Vermont? What is its range? To find answers to these questions, Gray's Manual, ed. 8, 1950 was consulted. On page 877, the range of this species is given as "Fla. to N. M., n. to w. N. E., N. Y., s. Ont., Mich., Wisc., Minn., s. Man., Wyo. and Utah" with the added comment, "often spread from cult." Vermont is part of western New England, but this reference does not indicate surely whether Vermont is included.

The Committee on Plant Distribution of the New England Botanical Club in its Seventeenth Report in *Rhodora* 69:311. 1967, lists Prunus americana from all New England states except Maine and on page 316 lists it as one of three species "chiefly from the three southern states."

In the *Flora of New England*, page 346, by the present writer, Prunus americana is listed from Willoughby and Johnson on the authority of the unrecorded persons who identified them, with a question mark after the Johnson record.

In the third edition (1937) of *The Flora of Vermont*, page 159, by E. J. Dole, Prunus americana is listed from "Woodstock (Mrs. Morgan); Charlotte (? Pringle); Brandon (? Dutton)." In the fourth edition of the same *Flora* (1969) by the present writer, this species is listed from Willoughby and Johnson. This summarizes some of the evidence from recent literature.

Next, consider the specimens upon which these records are based.

The Charlotte and Brandon localities are given in *The Flora of Vermont*, ed. 3, with question marks, indicating that they were uncertain. Both specimens are in the Pringle Herbarium. The Charlotte specimens collected by C. G. Pringle have blunt gland-tipped teeth and are therefore Prunus nigra Aiton. The specimen from Brandon

collected by D. Lewis Dutton, was originally identified as "Prunus americana Marshal (sic) var. nigra Wangheim." It likewise is Prunus nigra. The specimen from Woodstock, collected by "Mrs. Morgan," this writer has been unable to find. No indication is given as to the herbarium in which it is kept. A specimen from Norwich, also in the Pringle Herbarium, originally identified as P. americana is P. nigra and moreover is labeled cultivated.

The specimens from Johnson in the Pringle Herbarium have blunt gland-tipped leaves and therefore are P. nigra. The Willoughby record is based on a specimen in the Gray Herbarium and likewise proves to be P. nigra.

In the Pringle Herbarium there is a specimen labeled Prunus americana in the handwriting of C. G. Pringle, collected by him in "Ferrisburgh" but it does not affect the indigenous range as it is labeled "cult". Moreover its calyx-lobes are densely covered with fine hairs, whereas the calyx-lobes of this species are understood to be glabrous or nearly so.

Thus have been eliminated all the reports, so far as ascertained, of Prunus americana in Vermont except that based on specimens recently collected by Robert G. Hodgson, in 1972, in South Hero. These will be distributed to various herbaria. The conclusion is that South Hero is the only locality in Vermont where it is known to occur.

As for the other states of New England, Prunus americana is not known in Maine. In New Hampshire, it occurs only in the southeast, near the coast. The following specimens may be cited. Nashua, Hodgdon, Burns and Steele 14480 (NEBC); Barrington, Hodgdon 5936 (NEBC). Specimens ascribed to this species but of doubtful identity are: Alstead, Fernald 214 (GH); Surry, Fernald 429 (GH). To find a species so far removed from the others of its kind is not surprising when one considers how many others have a similar range. Among the species occurring in the region of Lake Champlain far from another station are the following: Polanisia dodecandra (L.) DC., Lechea maritima Leggett, Hudsonia tomentosa Nutt. var. intermedia Peck.

The characters commonly given in manuals for identification of Prunus americana need to be clarified. For instance, the leaves of this species have been described as "glabrous above". In two specimens, including Hodgdon, Burns and Steele 14480 (NEBC), the leaves are appressed-hairy above. The calyx-lobes are described as lance-attenuate. Often this is true but in Pl. Exs. Grayanae 961, from Mansfield, Conn., and many others, the calyx-lobes are blunt, oblong, not widened at base. Some calyx-lobes have become revolute so that they appear to be acute. The calyx may be either glabrous or hairy. The length of

the style varies from (6-)7-10(-12) mm, depending apparently on the degree of maturity. An attempt to find new characters by which to distinguish this from closely related species was unsuccessful. Pedicels prove to be about as often hairy as glabrous. The number of teeth on the margins of the leaf vary from (3.5-)4-9(-10) per cm, most often 6. The pubescence of the leaves beneath varies greatly from dense to sparse.

Characters which can be relied upon are (1) the sharpness of the teeth which distinguishes Prunus americana Aiton from Prunus nigra Aiton. The latter has blunt gland-tipped teeth. (2) The abruptly acuminate leaf-blades distinguish Prunus americana Marsh from Prunus alleghaniensis Porter in which the leaf-blades are gradually acuminate.

Frank C. Seymour,  
The Pringle Herbarium,  
University of Vermont, Burlington, Vt.

This expedition was supported in part by a grant from Chandler S. and Eleanor C. Robbins, for which I express many thanks.